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PATENT AND TRADEMARK OFFICE

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**SUPPLEMENTAL INFORMATION  
DISCLOSURE STATEMENT**

Docket Number:  
**11746/46602**

AUG 27 2003

TECH CENTER 1600/2900

Application Number  
**09/696,070**

Filing Date  
**October 25, 2000**

Examiner  
**S. Swope**

Art Unit  
**1652**

Invention Title  
**KDEL RECEPTOR INHIBITORS**

Inventor(s)  
**ROTHMAN et al.**

Address to:  
Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450

Date: August 21, 2003

Signature: Joseph A. Coppola  
Joseph A. Coppola (Reg. No. 38,413)

1. In accordance with the duty of disclosure under 37 C.F.R. § 1.56 and in conformance with the procedures of 37 C.F.R. §§ 1.97 and 1.98 and M.P.E.P. § 609, attorneys for Applicants hereby bring the attached references to the attention of the Examiner. These references are listed on the attached modified PTO Form No. 1449. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.
2. The filing of this Information Disclosure Statement and the attached PTO Form No. 1449, shall not be construed as an admission that the information cited is prior art, or is considered to be material to patentability as defined in 37 C.F.R. § 1.56(b).
3. A copy of each patent, publication or other information listed on the modified PTO form 1449 is enclosed.
4. It is believed that no fees are due in connection with this Information Disclosure Statement. However, should any fees be due, the Commissioner is authorized to charge or credit any over payment to Deposit Account No. 11-0600. A duplicate copy of this communication is enclosed for charging purposes.

Dated: August 21, 2003

By: Joseph A. Coppola  
Joseph A. Coppola (Reg. No. 38,413)

KENYON & KENYON  
One Broadway  
New York, N.Y. 10004  
(212) 425-7200 (telephone)  
(212) 425-5288 (facsimile)



**SUPPLEMENTAL  
INFORMATION DISCLOSURE  
STATEMENT  
BY APPLICANT PTO-1449**

ATTY. DOCKET NO.  
**11746/46602**

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APPLICANT  
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GROUP  
**1652**

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**U. S. PATENT DOCUMENTS**

EXAMINER'S INITIALS	PATENT NUMBER	PATENT DATE	NAME	CLASS	SUBCLASS	FILING DATE
	5,824,500	October 20, 1998	Bandman et al.			

**FOREIGN PATENT DOCUMENTS**

EXAMINER'S INITIALS	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION	
						YES	NO
	WO 97/06828	2/27/97	PCT				
	WO 98/18943	5/7/98	PCT				

**OTHER DOCUMENTS**

EXAMINER'S INITIALS	AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.
	Arap et al., "Cancer treatment by targeted drug delivery to tumor vasculature in a mouse model", Science (1998), vol. 279, pp. 377-380
	Balicki et al., "Gene therapy of human disease", Medicine (2002), vol. 81, pp. 69-86
	Bole et al. "Posttranslational association of immunoglobulin heavy chain binding protein with nascent heavy chains in nonsecreting and secreting hybridomas", J. Cell. Biol. (1986), vol. 102, pp. 1558-1566
	Bornstein, "Thrombospondins: structure and regulation of expression", FASEB J. (1992), vol. 6, pp. 3290-3299
	Cohen et al., "HIV-AIDS in 1998 - Gaining the Upper Hand?", JAMA (1998), vol. 280, no. 1. pp. 87-88
	Edgington, "Therapeutic applications of heat shock proteins", Bio/Technology (Dec. 1995), vol. 13, pp. 1442-1444
	Feldweg et al., "Molecular heterogeneity of tumor rejection antigen/heat shock protein GP96", Int. J. Cancer (1995), vol. 63, pp. 310-314
	Flynn et al., "Peptide-binding specificity of the molecular chaperone BiP", Nature (1991), vol. 353, pp. 726-730
	Flynn et al., "Peptide binding and release by proteins implicated as catalysts of protein assembly", Science (1989), vol. 245, pp. 385-390
	Freeman et al., "The human cytosolic molecular chaperones hsp90, hsp70 (hsc70) and hsp110 have distinct roles in recognition of a non-native protein and protein refolding", EMBO J. (1996), vol. 15, pp. 2969-2979



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EXAMINER'S INITIALS	AUTHOR, TITLE, DATE, PERTINENT PAGES, ET
	Hartl, "Molecular chaperones in cellular protein folding", Nature (1996), vol. 381, pp. 571-580
	Hendrick et al., "Molecular chaperone functions of heat-shock protein", Annu. Rev. Biochem (1993), vol. 62, pp. 349-384
	Lammert et al., "Protein disulfide isomerase is the dominant acceptor for peptides translocated into the endoplasmic reticulum", Eur. J. Immunol. (1997), vol. 27, pp. 1685-1690
	Leamon et al., "Delivery of macromolecules into living cells: A method that exploits folate receptor endocytosis", Proc. Nat'l. Acad. Sci. (1991), vol. 88, pp. 5572-5576
	Lewis and Pelham, "Sequence of a Second Human KDEL Receptor", J. Mol. Biol. (1992), vol. 226, pp. 913-916
	Li et al., "Tumor rejection antigen gp96/grp94 is an ATPase: implications for protein folding and antigen presentation", EMBO J. (1993), vol. 12, pp. 3143-3151
	Lindquist et al., "The heat-shock proteins", Annu. Rev. Genet (1988), vol. 22, pp. 631-677
	Lowrie et al., "Mycobacterium leprae hsp65 vaccinates mice against tuberculosis when expressed from the cloned gene in transplanted bone marrow cells" J. Cell. Biochem. (1995), Supp. Vol. 19b, p. 220 Abstract B6-316
	Lowrie et al., "Towards a DNA vaccine against tuberculosis", Vaccine (1994), vol. 12, pp. 1537-1540
	Lukacs et al., "Tumor cells transfected with a bacterial heat-shock gene lose tumorigenicity and induce protection against tumors", J. Exp. Med. (1993), vol. 178, pp. 343-348
	Malashkevich et al., "The crystal structure of a five stranded coiled coil in COMP: a prototype ion channel?", Science (1996), vol. 274, pp. 761-765
	Mazzarella et al., "ERp72, an abundant luminal endoplasmic reticulum protein, contains three copies of the active site sequences of protein disulfide isomerase", J. Biol. Chem. (1990), vol. 265, pp. 1094-1101
	Melnick et al., "The endoplasmic reticulum stress protein GRP94, in addition to BiP, associates with unassembled immunoglobulin chains", J. Biol. Chem. (1992), vol. 267, pp. 21303-21306
	Melnick et al., "Sequential interaction of the chaperones BiP and GRP94 with immunoglobulin chains in the endoplasmic reticulum", Nature (1994), vol. 370, pp. 373-375
	Miesenböck and Rothman, "The capacity to retrieve escaped ER proteins extends to the trans-most cisterna of the golgi stack", J. Cell. Biol. (1995), vol. 129, pp. 309-319
	Multhoff et al., "Heat shock proteins and the immune response", Ann. NY Acad. Sci. (1998), vol. 851, pp. 86-93
	Munro and Pelham, "A c-terminal signal prevents secretion of luminal ER proteins", Cell (1987), vol. 48, pp. 899-907
	Nieland et al., "Isolation of an immunodominant viral peptide that is endogenously bound to the stress protein GP96/GRP94", Proc. Natl. Acad. Sci. USA (1996), pp. 6135-6139
	Pelham, "Evidence that luminal ER proteins are sorted from secreted proteins in a post-ER compartment", EMBO J. (1988), vol. 7, pp. 913-918
	Piscitelli, "Immune-based therapies for treatment of HIV infection", The Annals of Pharmacotherapy (1996), vol. 30, pp. 62-76
	Ramarkishnan et al., "Conformation-defective herpes simplex virus 1 glycoprotein B activates the promoter of the grp94 gene that codes for the 94-kD stress protein in the Endoplasmic reticulum", DNA and Cell Biol. (1995), vol. 14, pp. 373-384
	Retzlaff et al., "Bacterial heat shock proteins directly induce cytokine mRNA and interleukin-1 secretion in macrophage cultures", Infect. Immun. (1994), vol. 62, pp. 5689-5693



EXAMINER'S INITIALS	AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.
	Schaiff et al., "HLA-DR associates with specific stress proteins and is retained in the endoplasmic reticulum in invariant chain negative cells", Exp. Med. (1992), vol. 176, pp. 657-666
	Semenza and Pelham, "Changing the specificity of the sorting receptor for luminal endoplasmic reticulum proteins", J. Mol. Biol. (1992), vol. 224, pp. 1-5
	Silva et al., "A single mycobacterial protein (hsp65) expressed by a transgenic antigen-presenting cell vaccinates mice against tuberculosis", Immunology (1994), vol. 82, pp. 244-248
	Singh-Jasuja et al., "The role of heat shock proteins and their receptors in the activation of the immune system", Biol. Chem. (2001), vol. 382, pp. 629-636
	Slepishkin et al., "Sterically stabilized pH-sensitive liposomes", J. Biol. Chem. (1997), vol. 272, pp. 2382-2388
	Srivastava et al., "Stress-induced proteins in immune response to cancer", Curr. Topics Microbiol (1991), vol. 167, pp. 109-123
	Suzuki et al. "Regulating the retention of t-cell receptor $\alpha$ chain variants within the endoplasmic reticulum: $Ca^{2+}$ -dependent association with BiP" J. Cell. Biol. (1991), vol. 114, pp. 189-205
	Verma et al. "Gene Therapy - Promises, Problems and Prospects" Nature (1997), vol. 389, pp. 239-242
	Wearsch et al., "Endoplasmic reticulum chaperone GRP94 subunit assembly is regulated through a defined oligomerization domain", Biochem. (1996), vol. 35, pp. 16760-16769
	Welsh et al. "Small Heat-shock protein family: function in health and disease", Ann NY Acad. Sci. (1998), vol. 851, pp. 28-35
	Wiech et al., "Hsp90 chaperones protein folding <i>in vitro</i> ", Nature (1992), vol. 358, pp. 169-170
	Zufferey et al., "Multiple attenuated lentiviral vector achieves efficient gene delivery <i>in vivo</i> ", Nature Biotechnology (1997), vol. 15, pp. 871-875

EXAMINER	DATE CONSIDERED
<p>EXAMINER: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>	